



U.S. Department of Transportation

Research and Special Programs Administration

CERTIFIED MAIL- RETURN RECEIPT REQUESTED

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AUG 15 1995

Mr. Donald Brinkley
President
Colonial Pipeline Company
Resurgens Plaza
945 East Paces Ferry Road
Atlanta, Georgia 30326-0855

Re: CPF 14501-H

Dear Mr. Brinkley:

Enclosed is the Consent Order in the above-referenced case issued by the Associate Administrator, Office of Pipeline Safety. Your receipt of the enclosed document constitutes service of that document under 49 C.F.R. § 190.5.

Sincerely,

Gwendolyn M. Hill

Pipeline Compliance Registry Office of Pipeline Safety

Enclosure

cc: Kalin Jones, Esq.

DEPARTMENT OF TRANSPORTATION RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION OFFICE OF PIPELINE SAFETY WASHINGTON, DC 20590

In the Matter of)
Colonial Pipeline Company,) CPF No. 14501-H
Respondent.

CONSENT ORDER

On May 16, 1994, the Director, Eastern Region, Office of Pipeline Safety (OPS), issued to Colonial Pipeline Company (Colonial), a Notice of Proposed Hazardous Facility Order (Notice) pursuant to 49 U.S.C. § 60112(b). The Notice proposed that Colonial submit an internal inspection plan and comply with a repair and replacement plan for Respondent's 36-inch, 32-inch, 22-inch and 6-inch pipelines operating in Virginia, Maryland, and North Carolina.

By letter dated June 1, 1994, Respondent requested a hearing pursuant to 49 C.F.R. § 190.233(c)(2). However, Respondent has agreed to resolve the case by consent in lieu of a hearing.

By the attached Agreement, Respondent has agreed to the issuance of this Consent Order and performance of corrective action with respect to its 36-inch and 32-inch pipelines.

Pursuant to 49 U.S.C. § 60112(c), notice and an opportunity to comment on this Agreement was provided to appropriate state officials from Virginia, Maryland and North Carolina. Accordingly, I hereby incorporate the terms of the Agreement and issue this Consent Order.

The Director, Eastern Region, OPS, may grant an extension of time, upon receipt of a written request stating reasons therefor, for completion of any of the actions that Colonial has agreed to perform in the Agreement.

Failure to comply with the terms of this Order may result in the assessment of civil penalties of up to \$25,000 per day or in referral of the matter to the Attorney General for action in the appropriate United States District Court. The terms and conditions of this Order are effective upon receipt.

Richard B. Felder

Associate Administrator for Pipeline Safety

Date Issued: 8/14/95

Attachment

AGREEMENT BETWEEN THE OFFICE OF PIPELINE SAFETY AND COLONIAL PIPELINE COMPANY IN

CPF No. 14501-H

WHEREAS, on May 16, 1994, the Office of Pipeline Safety (OPS), Research and Special Programs Administration (RSPA) issued to Colonial Pipeline Company (Colonial), as the operator of pipelines subject to the pipeline safety laws at 49 U.S.C. § 60101 et seq., a Notice of Proposed Hazardous Facility Order (Notice) pursuant to § 60112(b);

WHEREAS, the Notice applied to the following Colonial pipelines operating in Virginia, Maryland and North Carolina:

- 36-inch line operating between Greensboro, North Carolina and Dorsey Junction, Maryland (36-inch line);
- 32-inch line operating between Greensboro, North Carolina and Dorsey Junction, Maryland (32-inch line);
- 3. 22-inch line operating between Chantilly, Virginia and the Fairfax Tank Farm (22-inch line); and
- 4. 6-inch line operating between the Fairfax Tank Farm and Dulles Airport (6-inch line).

WHEREAS, the Notice proposed requiring Colonial to perform corrective action on its 36-inch, 32-inch, 22-inch and 6-inch pipelines as described in the Notice;

WHEREAS, following issuance of the Notice, OPS learned that Colonial's 22-inch pipeline was successfully hydrostatically tested in 1990, and is scheduled for an internal instrumented inspection in 1997, and that Colonial's 6-inch line was successfully hydrostatically tested in 1993, and inspected by a magnetic flux tool in August, 1994;

WHEREAS, Colonial has contested the basis for the Notice's issuance, and requested a hearing to challenge the Notice; and

WHEREAS, Colonial agrees voluntarily to undertake corrective action proposed in the Notice with respect to the 36-inch and 32-inch lines, and to internally inspect its 22-inch and 6-inch lines; OPS finds it appropriate to enter into this Agreement.

Therefore, Colonial and OPS agree as follows:

1. Colonial, as owner and operator of the hazardous liquid facilities to which the Notice applies, is subject to the jurisdiction of 49 U.S.C. § 60101 et seq. and administrative orders issued pursuant thereto.

- Colonial agrees to the issuance of an administrative order (consent order) incorporating the terms of this Agreement and waives any further procedural requirements, other than notice itself, with respect to its issuance and all rights to seek judicial review or otherwise contest its validity.
- 3. OPS agrees not to make a determination of hazardous facility order against Colonial based on the May 16, 1994 Notice in this case. However, nothing in this Agreement bars RSPA from taking action based upor new evidence to address any hazardous situation which may arise with respect to Colonial's facilities.
- 4. As of the date of this Agreement, OPS investigation of both accidents has not revealed any alleged violations of the pipeline safety laws. Nothing in this Agreement bars RSPA from taking action based upon further analysis or new evidence to address any potential violations of the pipeline safety laws or the regulations promulgated thereunder.
- 5. Any actions required by the terms of this agreement shall be in addition to other duties imposed by 49 U.S.C. Chap. 601, and the regulations promulgated thereunder. Compliance with the terms of this Agreement shall not excuse any failure to comply with the other requirements under 49 U.S.C. Chap. 601 and the regulations promulgated thereunder. The actions required by this Agreement are in addition to duties imposed by the pipeline safety laws and the regulations promulgated thereunder.
- 6. Colonial has voluntarily decided to enter into this agreement with OPS.
- 7. The terms of this Agreement may be construed by reference to the Notice and to the December 6, 1994 letter from Colonial to William Gute, Eastern Region Director, OPS (Director). In case of conflict, the terms of this Agreement shall control.
- 8. With respect to Colonial's 36-inch pipeline:
 - a. Colonial ran a slope/deformation pig between Greensboro, North Carolina and Dorsey Junction, Maryland in December 1994 and a magnetic flux leakage tool in March 1995. The manufacturer of the pig, Vetco Inc. (Vetco), is currently analyzing this data. Colonial agrees to ensure that OPS will receive the results of the analyzed data by August 18, 1995.

- b. Colonial is restricted by the Hazardous Facility Order issued to it on March 30, 1993, CPF No. 13503-H, from increasing the maximum operating pressure (MOP) of this line to a maximum pressure greater than 80% of certain segments of MOP prior to the accident. In deciding whether to permit an increase in operating pressure under that Order, the Director will consider whether successful inspections using internal instrumented inspection devices in accordance with Paragraph 8(a) of this Agreement and repairs or replacement in accordance with Paragraph 11 of this Agreement have been successfully completed.
- c. Colonial agrees to reinspect the Chantilly, Virginia to Dorsey Junction, Maryland segment of this line by October 31, 2000, using both a slope/deformation pig and a magnetic flux leakage tool. Within 15 days following completion of each reinspection report, Colonial agrees to ensure that OPS will receive the results of the analyzed data.
- 9. With respect to Colonial's 32-inch pipeline, Colonial agrees to conduct one of the following two tests:
 - a. Internal inspection using the British Gas elastic wave pig between Louisa, Virginia and Remington, Virginia and between Remington, Virginia and Dorsey Junction, Maryland. If this option is selected, Colonial further agrees that:
 - (i) Inspection will begin in the second quarter of 1996 between Remington, Virginia and Dorsey Junction, Maryland. Inspection of the Louisa, Virginia to Remington, Virginia began in 1995.
 - (ii) Colonial will submit a plan for conducting the internal instrumented inspection of the Remington, Virginia to Dorsey Junction, Maryland segment for approval from the Director. With respect to inspections on the Louisa to Remington, Virginia segment, Colonial agrees to submit a plan for the Director's approval that addresses the corrective action elements in 9(a)(iii). Colonial agrees to submit the plans by August 18, 1995.

(iii) The plans will: depth

(A) Describe the minimum crack defects that will be identified by the pig, in terms of length and width of defects. Cracks adjacent to the longitudinal weld that are at least as short as 2%-inch in length, and at least as deep as 25% of the nominal wall thickness of the pipe must be identifiable.

- (B) Include non-destructive techniques to evaluate anomalies, destructive testing evaluation criteria, if any is needed, and other techniques to demonstrate the effectiveness of the pig run.
- (C) Include acceptance criteria that use engineering calculations to determine whether cracks or crack-like features remaining in the line will grow by fatigue due to the normal operating pressure fluctuations during service.
- (iv) Taking the crack growth data described in paragraph 9(a) (iii) (C) into account, Colonial agrees to prepare an analysis to determine how long the pipeline could safely operate with those remaining cracks before another internal inspection, using a smart pig that could detect longitudinal seam defects, is needed. Colonial agrees to submit this analysis to the Director within 120 days after completion of the elastic wave pig run.
- (v) The success of the pig run is subject to concurrence by the Director. In order to provide the Director adequate assurance that the pig data produced on Colonial's line accurately identifies the anomalies described in Paragraph 9(a)(iii), Colonial agrees to submit to the Director, for approval, a validation procedure within the 120 day period following completion of the elastic wave pig run.

or:

b. Hydrostatically test the pipeline between Louisa, Virginia, and Dorsey Junction, Maryland. If this option is selected, Colonial further agrees that:

- (i) Hydrostatic testing will begin in the third quarter of 1995, for the Louisa, Virginia to Remington, Virginia portion and in the second quarter of 1996 for, the Remington, Virginia, to Dorsey Junction, Maryland portion. If hydrostatic testing of the line becomes necessary because of an unsuccessful elastic wave pig run, such testing would begin as soon as reasonably practicable for the Louisa, Virginia, to Remington, Virginia portion, following such a determination.
- (ii) Colonial will perform a hydrostatic test of the pipeline at a pressure between 100% of the segment's specified minimum yield strength (SMYS) at its lowest elevation, and 85% SMYS at its highest elevation.
- 10. With respect to Colonial's 32-inch pipeline:
 - a. Colonial agrees to run a Vetco magnetic flux leakage tool on its Greensboro, North Carolina, to Dorsey Junction, Maryland, pipeline segment. This pig will be run by the end of the second quarter 1997. The slope/deformation tool from Greensboro, North Carolina, to Dorsey Junction, Maryland, was run during April 1995.
 - b. Under the Agreed Plan for Testing Pipeline Facilities in CPF 10504A, Colonial is restricted from increasing the MOP of this line above 445 psig at the Louisa pump station, and from increasing the set pressure of the relief valves in Chantilly, Virginia above 330 psig. In deciding whether to permit an increase in operating pressure under that Order, the Director will consider whether successful inspections using internal instrumented inspection devices in accordance with Paragraph 9(a) of this Agreement and repairs or replacement in accordance with Paragraph 11 of this Agreement have been successfully completed.

- With respect to those actions specified in paragraphs 8 and 10 above, Colonial agrees to expose all dents that have a depth of at least 6% of the nominal diameter of the pipe and all dents on welds. In addition, Colonial agrees to expose all anomalies on the top half of the pipe and all buckles, regardless of their depth. Furthermore, Colonial agrees to develop a risk assessment methodology to determine the priority for repairing those sharp dents over 2% of the pipeline's nominal diameter. The risk assessment methodology is subject to the approval of the Colonial will perform a wet magnetic particle Director. inspection on all exposed anomalies found with any scratch, gouge or groove indication from the running of these tools. Colonial agrees to submit risk assessment methodology as soon as practicable, but no later than September 15, 1995.
- 12. Colonial agrees to provide OPS with analyses obtained following successful smart pig runs within 10 days after completion of the respective analyses.
- 13. OPS agrees to withdraw the Notice with respect to Colonial's 22-inch and 6-inch pipelines.
- 14. Colonial agrees to permit OPS, state and local government representatives to observe (at their expense) any of the testing provided for in Paragraphs 8, 9 and 10 of this Agreement. Colonial agrees to provide OPS forty-eight (48) hours advance notice prior to beginning a test.
- 15. Any decision made by the Director may be appealed to the Associate Administrator for Pipeline Safety.
- 16. This Agreement constitutes a settlement of all matters raised in the Notice on facts known to OPS at the time of this Agreement.
- 17. The Director may grant an extension of time, upon receipt of a written request stating reasons therefor, for completion of any of the actions required herein.
- 18. The effective date of this Agreement shall be the date upon which a consent order incorporating the terms of this Agreement is issued.

IT IS SO AGREED:

OFFICE OF PIPELINE SAFETY

Richard B. Felder

Associate Administrator for

Pipeline Safety

Date: 8/14/95

COLONIAL PIPELINE COMPANY

Donald Brinkley

President, Colonial Pipeline Company

Date:

8/9/95